UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

Anthony Law Birch

Bethesda, MD 20814

6915 Barrett Lane

10/26/2004

EXAMINER

THOMPSON JR, FOREST

ART UNIT

PAPER NUMBER

DATE MAILED: 10/26/2004

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695 828	10/26/2000	Robert Scott Niehoer	2907-104P	1872

TITLE OF INVENTION: AUTOMATED SYSTEM FOR CONDITIONAL ORDER TRANSACTIONS IN SECURITIES OR OTHER ITEMS IN COMMERCE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	YES	\$685	\$0	\$685	01/26/2005	

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

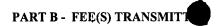
A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450

(703) 746-4000 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for

maintenance fee notifications							
CURRENT CORRESPONDENCE	any change of address)		Note: A certificate Fee(s) Transmittal papers. Each addit	e of mailing can only be used f . This certificate cannot be used tional paper, such as an assignmicate of mailing or transmission.	or domestic mailings of the for any other accompanying ent or formal drawing, must		
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Anthony Law Bir	ch			I haraby cartify th	Certificate of Mailing or Trans	smission	
6915 Barrett Lane	1.4		I hereby certify that this Fee(s) Transmittal is being deposi States Postal Service with sufficient postage for first class addressed to the Mail Stop ISSUE FEE address above, transmitted to the USPTO (703) 746-4000, on the date indice			rst class mail in an envelope	
Bethesda, MD 2081	14			addressed to the transmitted to the t	Mail Stop ISSUE FEE address USPTO (703) 746-4000, on the	above, or being facsimile date indicated below.	
					,	(Depositor's name)	
	Ÿ				•	(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INV	ENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/695,828	10/26/2000		Robert Scott Ni	eboer	2907-104P	1872	
TITLE OF INVENTION: AU	UTOMATED SYSTEM FO	R CONDITIONA	L ORDER TRANS	ACTIONS IN SECUR	RITIES OR OTHER ITEMS IN C	COMMERCE	
APPLN. TYPE	SMALL ENTITY	ISSUE F	EE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	YES	\$685		\$0	\$685	01/26/2005	
EXAM	INER	ART UN	IIT	CLASS-SUBCLASS			
THOMPSON	JR, FOREST	•		705-037000		,	
"Fee Address" indicati PTO/SB/47; Rev 03-02 o Number is required. 3. ASSIGNEE NAME AND	ence address (or Change of (2) attached. ion (or "Fee Address" Indicar more recent) attached. Use	Correspondence ation form e of a Customer E PRINTED ON	(1) the names or agents OR, a (2) the name or registered attor 2 registered pa listed, no name	f a single firm (having ney or agent) and the ent attorneys or agents will be printed.	as a member a names of up to s. If no name is 3	document has been filed for	
recordation as set forth in (A) NAME OF ASSIGNE				ling an assignment.	signee is identified below, the occupancy		
Please check the appropriate	assignee category or catego	ries (will not be n	inted on the natent) ·	Corporation or other private gr	roun entity Government	
4a. The following fee(s) are			p. Payment of Fee(·	Corporation of other private gr	oup chility — Government	
Issue Fee	ciicioscu.	70	`	e amount of the fee(s)	is enclosed		
	mall entity discount permitte	ed)	Payment by credit card. Form PTO-2038 is attached.				
Advance Order - # of	•	.u)	The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to				
Advance Order - # or	еоріся	· · · ·	Deposit Account	Number	(enclose an extra	copy of this form).	
5. Change in Entity Status	(from status indicated above	;)					
	MALL ENTITY status. See				MALL ENTITY status. See 37 C		
The Director of the USPTO i NOTE: The Issue Fee and Pu interest as shown by the reco	is requested to apply the Issuablication Fee (if required) votes of the United States Paters.	ue Fee and Publica will not be accepte ent and Trademark	tion Fee (if any) or d from anyone oth Office.	to re-apply any previ er than the applicant; a	ously paid issue fee to the applic registered attorney or agent; or t	ation identified above. the assignee or other party in	
Authorized Signature				Date			
Typed or printed name				_	ation No.	**	
This collection of informatio an application. Confidentiali submitting the completed ap this form and/or suggestions Box 1450, Alexandria, Virginia 22313- Alexandria, Virginia 22313-	for reducing this burden, sl nia 22313-1450. DO NOT	11. The information 122 and 37 CFR O. Time will vary hould be sent to the SEND FEES OR	on is required to ob 1.14. This collection depending upon the e Chief Information COMPLETED FO	tain or retain a benefit on is estimated to take he individual case. Ar n Officer, U.S. Patent RMS TO THIS ADDE	by the public which is to file (ar 12 minutes to complete, includi 19 comments on the amount of t and Trademark Office, U.S. Dep RESS. SEND TO: Commissioner	d by the USPTO to process) ing gathering, preparing, and ime you require to complete partment of Commerce, P.O. for Patents, P.O. Box 1450,	

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09/695,828 10/26/2000		Robert Scott Nieboer	2907-104P 1872	
7590 10/26/2004			EXAMINER	
Anthony Law Bir 6915 Barrett Lane	ch		THOMPSON	JR, FOREST
Bethesda, MD 208	14		ART UNIT	PAPER NUMBER
,				

DATE MAILED: 10/26/2004

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 845 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 845 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



United States Patent and Trademark Office

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75	90 10/26/2004		EXAM	INER	
Anthony Law Bire 6915 Barrett Lane			THOMPSON JR, FOREST		
Bethesda, MD 2081	.4		ART UNIT	PAPER NUMBER	
•					

DATE MAILED: 10/26/2004

Notice of Fee Increase on October 1, 2004

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2004, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" because some fees will increase effective October 1, 2004. See Revision of Patent Fees for Fiscal Year 2005; Final Rule, 69 Fed. Reg. 52604, 52606 (May 10, 2004).

The current fee schedule is accessible from WEB site (http://www.uspto.gov/main/howtofees.htm).

If the fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due" but not the correct amount in view of the fee increase, a "Notice of Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice of Pay Balance of Issue Fee," if the response to the Notice of Allowance is to be filed on or after October 1, 2004 (or mailed with a certificate of mailing on or after October 1, 2004), the issue fee paid should be the fee that is required at the time the fee is paid. See Manual of Patent Examining Procedure (MPEP), Section 1306 (Eighth Edition, Rev. 2, May 2004). If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously-paid issue fee should be paid. See MPEP Section 1308.01.

Effective October 1, 2004, 37 CFR 1.18 is amended by revising paragraphs (a) through (c) to read as set forth below.

Section 1.18 Patent post allowance (including issue) fees.

(a) Issue fee for issuing each original or reissue patent, except a design or plant patent:

	By a small entity (Sec. 1.27(a))	. \$685.00
	By other than a small entity	31,370.00
(b)	Issue fee for issuing a design patent:	
	By a small entity (Sec. 1.27(a))	\$245.00
	By other than a small entity	. \$490.00
(c)	Issue fee for issuing a plant patent:	
	By a small entity (Sec. 1.27(a))	\$330.00

By other than a small entity......\$660.00

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

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`	Application	No.	Applicant(s)				
A1 (* CAH 1 ***	09/695,828		NIEBOER ET AL.				
Notice of Allowability	Examiner		Art Unit				
•	Forest Ther	annon Ir	2625				
	Forest Thon	ipson Jr.	3625				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included nerewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.							
1. This communication is responsive to <u>07/15/2003</u> .							
The allowed claim(s) is/are <u>42-53</u> .							
	The drawings filed on <u>26 October 2000</u> are accepted by the Examiner.						
4. Acknowledgment is made of a claim for foreign priority und		§ 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some* c) ☐ None of the:		, , , , , (, , , , , , , , , , , , , ,					
1. Certified copies of the priority documents have	been receive	d.					
2. Certified copies of the priority documents have							
3. Copies of the certified copies of the priority doc		· · · · · · · · · · · · · · · · · · ·		on from the			
International Bureau (PCT Rule 17.2(a)).			5 11				
* Certified copies not received:							
5. Acknowledgment is made of a claim for domestic priority ur	nder 35 U.S.C	. § 119(e) (to a provisio	onal application).				
(a) The translation of the foreign language provisional a			,,				
6. Acknowledgment is made of a claim for domestic priority ur	nder 35 U.S.C	. §§ 120 and/or 121.					
below. Failure to timely comply will result in ABANDONMENT of to 7. A SUBSTITUTE OATH OR DECLARATION must be subm	Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 7. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.						
 8. CORRECTED DRAWINGS must be submitted. (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No 	son's Patent D	rawing Review (PTO-	948) attached				
(b) including changes required by the proposed drawing of	correction filed	, which has be	en approved by the Ex	aminer.			
(c) ☐ including changes required by the attached Examiner'							
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.							
9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.							
Attachment(s)							
 Notice of References Cited (PTO-892) Notice of Draftperson's Patent Drawing Review (PTO-948) Information Disclosure Statements (PTO-1449), Paper No Examiner's Comment Regarding Requirement for Deposit of Biological Material 	·	4⊠ Interview Summa 6⊠ Examiner's Amen	I Patent Application (P ⁻ rry (PTO-413), Paper N ndment/Comment ment of Reasons for Al	lo. <u>7</u> .			

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Conclusion

DETAILED ACTION

1. Claims 42-53 are allowed.

EXAMINER'S AMENDMENT

- 2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
- 3. Authorization for this examiner's amendment was given in a telephone interview with Anthony Birch (applicants' representative), on 09/25/2003.

The application has been amended as follows:

In claim 52, line 1, after "claim" insert --43--.

Terminal Disclaimer

4. The terminal disclaimer filed on 07/15/2003 disclaiming the terminal portion of any patent granted on this application that would extend beyond the expiration date of U.S. Patent #6,418,419 has been reviewed (see Paper #6) and is accepted. The terminal disclaimer has been recorded.

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Response to Amendment

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action (see Paper #4), or will be included here for clarity, as necessary. The text of those sections of Title 35, U.S. Code not otherwise provided in a prior Office action will be included in this action where appropriate.

- 6. This action is in response to applicant's amendment B (see Paper #5) filed 07/15/2003 and the examiner's amendment above. Amendment B amended claims 42, 43, 45, 47, 49, 51, 52, and 53. Examiner's amendment amended claim 52. Claims 42-53 are pending.
- 7. Claims 42-53 are allowed.

Claim Objections

8. Claims 42-52 are objected to because of minor informalities. Applicant's amendment B amended claims 42, 43, 45, 47, 49, 51, 52, and 53, and has overcome the informalities. Therefore, examiner withdraws the objection.

Double Patenting

9. Claims 42, 43, 45, 47, 51, and 53 were rejected under the judicially created doctrine of double patenting over claims 1, 8, 24, 41, and 43 of U. S. Patent No. 6,418,419 since the claims, if allowed, would improperly extend the "right to exclude"

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already granted in the patent. Applicant's timely filing of a Terminal Disclaimer has overcome the rejection. Therefore, examiner withdraws the rejection.

Allowable Subject Matter

10. The following is an examiner's statement of reasons for allowance:

Applicant's invention presents a network and workstation for conditional trading of items, such as securities and contracts. The key elements, which are specified in independent claim # 42, 43, 45, 47, 49, and 53, the combination of which differentiate the invention over prior art, include controlling a computer coupled to each of the trader terminals over a communications network and receiving as inputs:

- an item input in the form of an algorithm with constraints thereon,
- a price set forth within an order is represented as an algorithm with constraints thereon,
- the price for the trade of one item is a dependent variable of the algorithm within the constraints,
- a price of another security is an independent variable of the algorithm within the constraints,
- the price is the dependent variable being continuously changeable responsive to changes in price of the independent variable,
- matching or comparing, in accordance with the constraints and conditions, algorithmic or non-algorithmic buy/sell orders with algorithmic or non-algorithmic sell/buy orders; and

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the algorithm representing a buy or sell order.

Claim 42 discloses, in combination with the above features, the feature of one of the conditions being the requirement that two or more securities are tradable contemporaneously as a contingent trade of those respective securities.

Additionally, claims 43, 45, 47, 49, and 53 disclose, in combination with the above features, the feature of simultaneously executing a trade of said items in the same or diverse markets as a single electronically matched trade.

The combination of theses features make claims 42, 43, 45, 47, 49, and 53 distinct over prior art. Prior art discloses some of the aspects or properties of the invention, as well as the aspect of buyers defining contract terms (Shepherd [U.S. Patent No. 6,134,53], col. 9 lines 20-22), whereas the invention does not allow buyers to define contract terms; system administrators pre-define and input the securities and contracts. Prior art does not disclose or suggest the above features in combination as disclosed in applicant's invention and stated in all of the independent claims 42, 43, 45, 47, 49 and 53.

Prior art of record includes:

- Shepherd (U.S. Patent No. 6,134,536) discloses methods and apparatus that deal with the management of risk relating to specified, yet unknown, future events;

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- Borgato (U.S. Patent No. 5,950,178) discloses representations of stock market activity may be represented on a graphics computer monitor/screen for monitoring activity related to stocks and the market;

- Williams et al. (U.S. Patent No. 5,999,918) discloses a computer interface system that includes interactive interface controls as well as aural and kinetic interface controls to assist in educating a user, in profiling a user, and in controlling and monitoring the implementation of actions involving probabilistic distributions;
- Wiseman (U.S. Patent No. 5,168,446) discloses a system is provided for processing spot trades in selected commodities among a group of trading stations in a communication network through a series of structured stages;
- Ferstenberg et al. (U.S. Patent No. 5,873,071) discloses, in a preferred embodiment, this invention includes software processes distributed on one or more computer systems that exchange messages in order to facilitate an intermediated exchange of financial commodities between a plurality of participants;
- Kull, David; Keough, Lee; "The house of games;" Computer Decisions; v20, n8, pg. 43(11); August 1989, discloses the New York Stock Exchange tries to change computer-triggered trading schemes and restore investor confidence after the October 19, 1987 stock market collapse;
- Scholldorf (EPO Patent No. 0 411 748 A2) discloses a risk control matching system for trading instruments, such as foreign exchange currencies, in which bids are automatically matched against offers for given trading instruments;

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- Lupien (EPO Patent No. 0 401 203) discloses an automated system for managing one or more large investor portfolios containing both cash and numerous, diversified securities in a real time environment providing liquidity to the securities markets while maintaining predetermined portfolio objectives for each portfolio;

- "State Street and the Boston Stock exchange Announce Exclusive Agreement
 On State Street's Bond Connect in the United States;" Business Editors; 19 August
 1998; discloses limitations in the traditional trading environment by offering investors the
 ability to formulate orders linked to portfolio strategy; and
- Lee, Charles M.C.; "Market integration and price execution for the NYSE-listed securities;" Journal of finance; v48; n3; pg. 1003(30); July 1993; discloses, for NYSE listed securities, the price execution of seemingly comparable orders differs systematically by location.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Forest Thompson Jr. whose telephone number is (703) 306-5449. The examiner can normally be reached on 6:30-3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins can be reached on (703) 308-1344. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

FT [/ /

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600